UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,672	06/20/2001	Ludmila Cherkasova	10006757	8642

7590   09/24/2004

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EXAMINER
JOO, JOSHUA

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/886,672	CHERKASOVA ET AL.
	Examiner	Art Unit	
	Joshua Joo	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _06/20/2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _15-20_ is/are allowed.

6)☒ Claim(s) _1-6 and 8-13_ is/are rejected.

7)☒ Claim(s) _7 and 14_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

1.   Claims 1-20 are presented for examination.

Allowable Subject Matter

2.   Claims 15-20 have allowable subject matter.

3.   Claims 7 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Objections

4.   The following claims are objected to because of the following informalities:

i.   As per claim 7, line 20, and claim 9, line 5, claims are missing the words "subset of files" after "first".

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   As per claim 10, the claim lacks proper antecedent basis. There is no previous mention of a said "web server cluster" in claim 8. It is assumed that the claim is misnumbered, and that claim 10 is depended on claim 9. Claim 10 will be depended on claim 9 here on after.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   Claims 1-6, 8-10, 12, and 13 are rejected under 35 U.S.C. 102(e) as being

unpatentable by Logue et al, US Patent #6,330,606, Logue hereinafter.

9.   As per claim 1, Logue teaches an invention of a plurality of nodes where each

node of said plurality of nodes comprises of:

        a)   A distributor component for distributing a request to a specific node of

said plurality of nodes. (Fig. 10, #1030. Column 10, line 48-50. The request is

forwarded to the appropriate proxy server.)

        b)   A dispatcher component comprising routing information for said plurality

of nodes and replicated across said plurality of nodes, wherein routing information

indicates which said node of plurality of nodes is for processing said request, said

dispatcher component coupled to said distributor component. (Column 10, line 20-29.

Dispatcher may be incorporated into each server. The proxy server determines which

server is appropriate for the request.)

        c)   A server component for processing said request, said server component

coupled to said dispatcher component. (Column 10, line 50-52. The proxy server

attempts to serve the request from its local document cache.)

d)   Plurality of nodes are coupled to a network. (Fig. 4, #3. Column 3, line

43. Network infrastructure such as the Internet.)

10.   As per claim 2, Logue teaches the invention of claim 1, where the server cluster

is a web server cluster. (Fig. 4, #415. Column 5, line 57. Hit accumulator server may

act as a Web server.)

11.   As per claim 3, Logue teaches the invention of claim 1, where the server cluster

comprises of a set of base files, wherein said base files are a set of frequently accessed

files fitting into a cluster memory of said server cluster. (Column 5, line 20-22. Proxy

has a cache to retrieve local documents.)

12.   As per claim 4, Logue teaches the invention of claim 1, where the cluster

memory is a combined random access memory of each said nodes of said server

cluster. (Column 4, line 32-33. Server has random access memory. Column 5, line 5-6.

The proxy server includes a document cache. Column 9, line 56-57. Invention can

comprise a plurality of proxy servers.)

13.   As per claim 5, Logue teaches the invention of claim 1, where each of said

plurality of nodes further comprises a set of core files and set of partitioned files.

(Column 10, line 13-19. Web information may be in a cluster of two or more proxy

servers. A popular document can be shared among the proxy servers. Column 9, line

62-66. The contents of the web are distributed among the proxy servers. A URL is

mapped to only one of the plurality of proxy servers.)

14.   As per claim 6, Logue teaches the invention of claim 1, where the set of core files

comprises a set of most frequently accessed files of said set of base files. (Column 5,

line 20-22. Proxy has a cache to retrieve local documents.)

15.   As per claim 8, Logue teaches an invention for managing request distribution to a

set of files stored on a server, where the invention comprises:

> a)   i.   Receiving a request for a file at a first node of plurality of nodes.
> (Column 10, line 24-25. Client request may be initially handled by one of
> the proxy servers.)
>
> ii.   Each node comprising a distributor component for distributing
> request to a specific node of said plurality of nodes. (Column 10, line 24-
> 27. Request can be handled by one of the proxy servers. The initial
> proxy server may forward the request to the appropriate server.)
>
> iii.   Each node comprising a dispatcher component comprising routing
> information for said plurality of nodes and replicated across said plurality
> of nodes. (Column 10, line 22-23. Dispatcher may be in each server.)
>
> iv.   Each node comprising a server component for processing said
> request. (Column 10, line 50-51. The server attempts to service the
> request from its local cache.)
>
> b)   Provided said request is for a core file, processing said request at said

first node. (Column 10, line 41-44. The proxy server receives the client request,

assumes it is the appropriate server, and checks its cache.)

> c)   Provided said request is for a partitioned file, determining whether said

request is assigned to be processed by said first node.

> > i.   Provided said request is for a partitioned file assigned to be
> > processed by said first node, processing said request at said first
> > node. (Column 9, line 62-64. The content of the web can be
> > distributed among proxy servers. Column 10, line 42-44. The
> > initial proxy server may assume it is the appropriate server and
> > attempts to serve the request.)
> >
> > ii.   Provided said request is for a partitioned file assigned to be
> > processed by another node of said plurality of nodes as indicated
> > by said dispatcher component of said first node and processing
> > said request at said specific node. (Column 10, line 48-54. Initial

server determines appropriate server and forwards request to the server. If found in cache, the server processes request from local document cache.)

d)   Provided said request is not for a said core file or a said partitioned file, processing said request at said first node. (Column 10, line 53-54. If a cache miss occurs, the server will retrieve the document from an appropriate server and store the copy locally.)

16.   As per claim 9, Logue teaches the invention of claim 8, where the server is a web server. (Fig. 4, #415. Column 5, line 57. Hit accumulator server may act as a Web server.)

17.   As per claim 10, Logue teaches the invention of claim 8, where the invention comprises a set of base files wherein said base files are a set of frequently accessed files fitting into a cluster memory of said web server cluster. (Column 5, line 20-22. Proxy has a cache to retrieve local documents.)

18.   As per claim 12, Logue teaches the invention of claim 8, where each of said plurality of nodes further comprises a set of core files comprising said core file and set of partitioned files comprising said partitioned file. (Column 10, line 13-19. Web information may be in a cluster of two or more proxy servers. A popular document can be shared among of the proxy servers. Column 9, line 62-66. The contents of the web are distributed among the proxy servers. A URL is mapped to only one of the plurality of proxy servers.)

19.   As per claim 13, Logue teaches the invention of claim 8, wherein said set of core

files comprises a set of most frequently accessed files of said set of base files. (Col. 5,

line 20-22. Proxy has a cache to retrieve local documents.)

Claim Rejections - 35 USC § 103

20.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

21.   Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logue

and in view of Brendel et al, US Patent #5,774,660, Brendel hereinafter.

22.   Logue teaches an invention where a server cluster has a plurality of nodes,

where each node can serve requests for core files and partitioned files.   However,

Logue fails to teach that his invention has files on disk. Brendel teaches an invention for

a multi-node server, where each server has a different content of file on its local disk, but

also have frequently accessed files replicated on all servers (Column 10, lines 54-65).   It

would have been obvious at the time of the invention was made to a person having

ordinary skill in the art to combine Logue's invention with Brendel's server with files on

disk because both inventions are trying to maximize server efficiency. By combining the

server with files on disk disclosed in Brendel's invention with Logue's invention, it will

allow Logue's invention a greater capability in servicing client requests by being able to
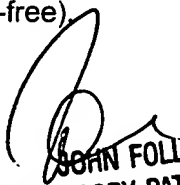
access files from a secondary source.

Conclusion

23.   A shortened statutory period for reply to this Office action is set to expire THREE

MONTHS from the mailing date of this action.

24.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joshua Joo whose telephone number is 703 605-4345.

The examiner can normally be reached on Monday to Friday 7 to 4.

25.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John A Follansbee can be reached on 703 305-8498. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-

9306.

26.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

JJ
September 10, 2004